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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Jason M Brewer

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06/14/2006

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EXAMINER

BLAIR, DOUGLAS B

ART UNIT

PAPER NUMBER

2142

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/494,218

Applicant(s)

BREWER, JASON M

Examiner

Douglas B. Blair

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Appeal Brief, filed 3/20/2006, with respect to the rejection(s) of claim(s) 1-9 have been fully considered. Though the arguments are not entirely persuasive they do point out the ambiguity in the applicant's claim language. Specifically, the applicant argues that Brown does not teach a gateway but the term gateway is never clearly defined in the applicant's specification. Therefore, new rejections based on 35 USC section 112 seem applicable.

2. In view of the Appeal Brief filed on 3/20/2006, PROSECUTION IS HEREBY REOPENED. A new grounds of rejection is set forth below.

3. To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

Claim Objections

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4. Claim 2 is objected to because of the following informalities: an article needs to be in front of “gateway in the first two limitations of the claim and an article also needs to be placed in front of Java virtual machine in the final limitation of claim 2. Appropriate correction is required.

5. Claim 7 is objected to because of the following informalities: an article needs to be in front of “gateway in the first two limitations of the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 5-6 and 8-9 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The structure of the means claimed is critical or essential to the practice of the invention, but not included in the claim(s) and is not enabled by the disclosure.

There is no description of the structure of claimed means. See MPEP § 2181.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-2 and 5-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a

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gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: it is unclear whether the gateway server claimed in the first limitation is the server in the preamble of the claim because there is never any mention of just a plain server after the preamble. For examination purposes, the gateway server is assumed to be the same entity as the server, since there is no disclosure of the gateway server being separate from the main server in the applicant's specification.

11. Claim 1 recites the limitation "sending only the new portion to the client" in the final limitation of claim 1. There is insufficient antecedent basis for this limitation in the claim. There are new portions described previously in the claim but no specific singular new portion.

12. Claim 2 recites the limitation "the internal class structures in the interpreter of Java virtual machine of the client device" in the final limitation of claim 2. There is insufficient antecedent basis for this limitation in the claim.

13. Claims 5 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: it is unclear how a gateway can be responsive to a Java class file since a Java class file is static data structure so it is unclear how it could create any stimuli for the gateway to be responsive to.

14. Claim 5 recites the limitation "said class file" in the first limitation of the claim. There is insufficient antecedent basis for this limitation in the claim. It will be assumed for examination purposes that the class file is referring to the Java class file.

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15. Claims 7 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the preamble of each claim deals with loading Java class files onto an embedded client device but it unclear from the claims and the applicant's specification what the client device is embedded to.

16. Claims 5-6 and 8-9 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the structure for the means in each of the claims is never disclosed in the applicant's specification. See MPEP § 2181.

Claim Rejections - 35 USC § 102

17. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

18. Claim 5 is rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Number 6,295,638 to Brown et al..

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19. As to claim 5, Brown teaches a system for loading Java class file to a client device (col. 2, lines 50-67) comprising: a gateway coupled to said server and responsive to a Java class file for creating a c-code representation of said class file (col. 7, lines 25-44, The front end compiler creates a c-code representation.); said gateway creating a binary representation of said c-code representation (col. 7, lines 25-44, The backend compiler creates optimized content.); a network coupled between said gateway and said client device for sending the binary representation to said client device (col. 5, lines 38-54); a loader for loading said binary representation at said client device (col. 8, lines 20-61); and, means for copying said binary representation into the internal class structure in an interpreter of said client device (col. 8, lines 62-67 and col. 9, lines 1-15).

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. Claims 1-3 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,295,638 to Brown et al. in view of U.S. Patent Number 6,389,589 to Mishra et al..

22. As to claim 1, Brown teaches a method for loading class files from a server to a client (col. 2, lines 50-67) comprising: loading an application class onto a gateway server that preloads and preresolves said class (col. 7, lines 25-44, The front end compiler preloads and preresolves the classes.); creating a binary representation of new portions of the preloaded and preresolved

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class at said gateway (col. 7, lines 25-44, The backend compiler creates optimized content.); however Brown does not explicitly teach sending only the new portion to the client.

Mishra teaches a method of sending only the new portions of application classes to the client (col. 17, lines 36-62, Only upgrade components are sent to the client.).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Brown regarding a method for loading class files with the teachings of Mishra regarding a method for sending only new portions of classes to a client because sending a smaller amount of data conserves bandwidth.

23. Brown teaches the invention substantially as claimed (e.g. exemplary claim 7) including a method for loading Java class files to an embedded client device from a server (col. 2, lines 50-67) comprising the steps of: gateway retrieving a Java class file, gateway preloading and preresolving the Java class file to produce a representation of the Java class file (col. 7, lines 25-44, The front end compiler preloads and preresolves the classes.); creating at the gateway a binary representation of only said new portion of the preloaded and preresolved representation of the Java class file (col. 7, lines 25-44, The backend compiler creates optimized content.); sending said binary representation into said embedded client device (col. 5, lines 38-54); and, copying said binary representation into the internal class structures in the interpreter of a Java virtual Machine of the embedded client (col. 8, lines 62-67 and col. 9, lines 1-15); however Brown does not explicitly teach a method of determining at the gateway a new portion of the representation and forwarding only the new .

Mishra teaches a method of determining at the gateway a new portion of the representation (col. 17, lines 36-62, The server determines which client components to upgrade.).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Brown regarding a method for loading Java classes with the teachings of Mishra regarding the method of making a determination of which class to load because sending a smaller amount of data conserves bandwidth.

24. As to claim 2, it comprises the same steps as claim 7 with a broader preamble therefore it is rejected on the same basis as claim 7.

25. As to claim 3, Brown-Mishra teaches the method of claim 2 including determining new portions of a class representation. Brown teaches creating a c-code representation of the Java class file (col. 7, lines 25-44, The front end compiler creates a c-code representation.), and creating a binary representation of said c-code representation; however Brown does not explicitly teach a method for determining new portions or creating binaries of only new portions.

Mishra teaches a method of determining new portions of code and creating binaries of the new portions (col. 17, lines 36-62).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Brown regarding a method for loading Java classes with the teachings of Mishra regarding the method of making a determination of which class to load because sending a smaller amount of data conserves bandwidth.

26. As to claim 6, Brown teaches the system of claim 5; however Brown does not explicitly teach a system for determining new portions of the c-code representation or sending only new portions of the c-code representations.

Mishra teaches a system including a means for determining new portions of a c-code representation, and a means for creating binary representations of only new portions of the c-

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code representations, and a means for sending only the new portions to a client (col. 17, lines 36-62).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Brown regarding a method for loading Java classes with the teachings of Mishra regarding the method of making a determination of which class to load because sending a smaller amount of data conserves bandwidth.

27. Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,295,638 to Brown et al. in view of U.S. Patent Number 6,389,589 to Mishra et al. as applied to claim 2 above, and further in view of U.S. Patent Number 6,263,360 to Arnold et al..

28. As to claim 4, the teachings of Brown-Mishra combine to make claim 2 obvious; however Brown and Mishra do not explicitly teach sending the classes over a wireless network.

Arnold teaches a method of sending Java classes over a wireless network (col. 26, lines 25-67).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Brown-Mishra regarding a method for loading Java classes with the teachings of Arnold regarding a method for sending Java classes over a wireless network because Java is a common tool for developing wireless applications due to its platform independence (col. 24, lines 51-63 of Arnold).

29. As to claim 9, the limitations of claim 9 are rejected for the same reasons as claim 7.

30. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,295,638 to Brown et al. in view of U.S. Patent Number 6,263,360 to Arnold et al..

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31. As to claim 8, it has the same limitations as claim 5 with the additional limitation of sending classes over a wireless network. Brown does not teach sending classes over a wireless network.

Arnold teaches a method of sending Java classes over a wireless network (col. 26, lines 25-67).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Brown regarding a system for loading Java classes with the teachings of Arnold regarding a system for sending Java classes over a wireless network because Java is a common tool for developing wireless applications due to its platform independence (col. 24, lines 51-63 of Arnold).

Response to Arguments

32. Applicant's arguments filed 3/20/2006 have been fully considered but they are not persuasive. The applicant argues the Brown does not teach the applicant's gateway. However the compilers, discussed in col. 7, lines 25-44 of Brown, function as a gateway in that they provide the link between the server and the client. There are no limitations present in the claims that force the gateway to be a server separate from the main server. Though the claims are read in light of the specification, limitations from the specification are not read into the claims. Furthermore there is no disclosure anywhere in the applicant's specification of the gateway being separate from the main server. In fact, the only place that the term "gateway server" is present in the applicant's specification is the summary but again there is no mention of a second server in this summary that would indicate that the applicant's gateway is not part of a main server. So

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the examiner's interpretation of Brown, mainly that the gateway is included in the server, is even consistent with the applicant's very detail-limited three pages of invention description present in specification.

Conclusion

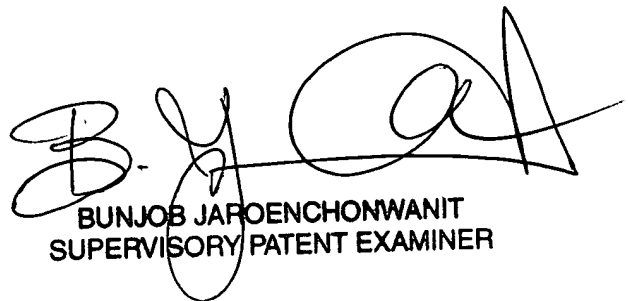
33. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas B. Blair whose telephone number is 571-272-3893. The examiner can normally be reached on 8:30am-5pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3800.

Douglas Blair
June 11, 2006

DBB



BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER